

CLAIMS

I claim:

1. A wireless communication system, comprising  
repeated pattern of cells, each cell having a base  
station;

a user station;

wherein base station transmitters and user station  
transmitters in a cell are assigned <sup>for each</sup> <sup>specific</sup> a spread-spectrum code for  
modulating radio communication in that cell;

whereby radio signals used in that cell are spread  
across a bandwidth sufficiently wide that both base station  
receivers and user station receivers in an adjacent cell may  
distinguish communication which originates in one cell from  
another; and

whereby said codes are each reused in a plurality of  
cells.

2. A wireless communication system as in claim 1,  
wherein said repeated pattern comprises a three-dimensional  
configuration.

3. A wireless communication system as in claim 1,  
wherein said repeated pattern comprises the pattern shown in  
figure 1.

1 4. A wireless communication system in claim 1,  
2 wherein said user station transmitters emit data communication  
3 messages which include station identification information.  
4

5 5. A wireless communication system as in claim 1,  
6 wherein said codes are assigned dynamically for each cell.  
7

8 6. A wireless communication system as in claim 1,  
9 wherein said codes are assigned dynamically for each cell by each  
10 of a plurality of independent communication systems, after  
11 accounting for use by other systems.  
12

13 7. A wireless communication system as in claim 6,  
14 wherein said use is concurrent use.  
15

16 8. A wireless communication system as in claim 6,  
17 wherein said use is prior use.  
18

19 9. A wireless communication system as in claim 1,  
20 wherein said codes comprise a set of codes with minimal cross-  
21 correlation attribute.  
22

23 10. A wireless communication system as in claim 1,  
24 wherein said codes comprise a limited number of  
25 predetermined codes; and  
26 wherein said cells are arranged in a repeated pattern  
27 of three cells.  
28

11. A wireless communication system as in claim 10,  
wherein said limited number is three.

12. A wireless communication system as in claim 10,  
further comprising time division and frequency division.

13. A wireless communication system as in claim 12,  
wherein a plurality of frequencies are assigned dynamically.

14. A wireless communication system as in claim 12,  
wherein a plurality of frequencies are assigned dynamically by  
each of a plurality of independent communication systems, after  
accounting for use by other systems.

15. A wireless communication system as in claim 14,  
wherein said use is concurrent use.

16. A wireless communication system as in claim 14,  
wherein said use is prior use.

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